Revised 3-16-05

2004-2005 No Child Left Behind - Blue Ribbon Schools Program

U.S. Department of Education

Cover Sheet

Type of School: _x_ Elementary ___ Middle ___ High ___ K-12

Name of Principal Mrs. Diane G. Terrell
(Specify: Ms., Miss, Mrs., Dr., Mr., Other) (As it should appear in the official records)

Official School Name Arthur Road Elementary School
(As it should appear in the official records)

School Mailing Address 33425 Arthur Road
(If address is P.O. Box, also include street address)

Solon	Ohio	44139-4599
City	State	Zip Code+4 (9 digits total)

County Cuyahoga School Code Number* 001057

Telephone (440)349-6210 Fax (440)349-8018

Website/URL www.solonschools.org E-mail dterrell@solonboe.org

I have reviewed the information in this application, including the eligibility requirements on page 2, and certify that to the best of my knowledge all information is accurate.

_____ Date_____
(Principal's Signature)

Name of Superintendent* Mr. Joseph Regano
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name Solon City Schools Tel. (440)248-1600

I have reviewed the information in this application, including the eligibility requirements on page 2, and certify that to the best of my knowledge it is accurate.

_____ Date_____
(Superintendent's Signature)

Name of School Board President/Chairperson Mrs. Linda Wise
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this package, including the eligibility requirements on page 2, and certify that to the best of my knowledge it is accurate.

_____ Date_____
(School Board President's/Chairperson's Signature)

PART I - ELIGIBILITY CERTIFICATION

The signatures on the first page of this application certify that each of the statements below concerning the school's eligibility and compliance with U.S. Department of Education, Office of Civil Rights (OCR) requirements is true and correct.

1. The school has some configuration that includes grades K-12. (Schools with one principal, even K-12 schools, must apply as an entire school.)

2. The school has not been in school improvement status or been identified by the state as "persistently dangerous" within the last two years. To meet final eligibility, the school must meet the state's adequate yearly progress requirement in the 2004-2005 school year.

3. If the school includes grades 7 or higher, it has foreign language as a part of its core curriculum.

4. The school has been in existence for five full years, that is, from at least September 1999 and has not received the 2003 or 2004 *No Child Left Behind – Blue Ribbon Schools Award.*

5. The nominated school or district is not refusing the OCR access to information necessary to investigate a civil rights complaint or to conduct a district-wide compliance review.

6. The OCR has not issued a violation letter of findings to the school district concluding that the nominated school or the district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if the OCR has accepted a corrective action plan from the district to remedy the violation.

7. The U.S. Department of Justice does not have a pending suit alleging that the nominated school, or the school district as a whole, has violated one or more of the civil rights statutes or the Constitution's equal protection clause.

8. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school or school district in question; or if there are such findings, the state or district has corrected, or agreed to correct, the findings.

PART II - DEMOGRAPHIC DATA

All data are the most recent year available.

DISTRICT (Questions 1-2 not applicable to private schools)

1. Number of schools in the district:
   4 Elementary schools
   2 Middle schools
   ___ Junior high schools
   1 High schools
   ___ Other

   7 TOTAL

2. District Per Pupil Expenditure: $10,820.08

   Average State Per Pupil Expenditure: $ 8,768.00

SCHOOL (To be completed by all schools)

3. Category that best describes the area where the school is located:

   [ ] Urban or large central city
   [ ] Suburban school with characteristics typical of an urban area
   [x] Suburban
   [ ] Small city or town in a rural area
   [ ] Rural

4. 8 Number of years the principal has been in her/his position at this school.

   ___ If fewer than three years, how long was the previous principal at this school?

5. Number of students as of October 1 enrolled at each grade level or its equivalent in applying school only:

Grade	# of Males	# of Females	Grade Total	Grade	# of Males	# of Females	Grade Total
PreK				**7**			
K	38	28	**66**	**8**			
1	38	46	**84**	**9**			
2	42	42	**84**	**10**			
3	38	34	**72**	**11**			
4	40	51	**91**	**12**			
5				**Other**			
6							
			TOTAL STUDENTS IN THE APPLYING SCHOOL →				397

6. Racial/ethnic composition of the students in the school:

78 % White
13 % Black or African American
_____ % Hispanic or Latino
9 % Asian/Pacific Islander
0 % American Indian/Alaskan Native
100% Total

Use only the five standard categories in reporting the racial/ethnic composition of the school.

7. Student turnover, or mobility rate, during the past year: 5 %

(This rate should be calculated using the grid below. The answer to (6) is the mobility rate.)

(1)	Number of students who transferred ***to*** the school after October 1 until the end of the year.	13
(2)	Number of students who transferred ***from*** the school after October 1 until the end of the year.	4
(3)	Subtotal of all transferred students [sum of rows (1) and (2)]	17
(4)	Total number of students in the school as of October 1.	351
(5)	Subtotal in row (3) divided by total in row (4)	.0484
(6)	Amount in row (5) multiplied by 100	4.84

8. Limited English Proficient students in the school: 3 %
10 Total Number Limited English Proficient

Number of languages represented: 3
Specify languages: Russian, Tagalog, Other

9. Students eligible for free/reduced-priced meals: 5 %

Total number students who qualify: 15 free. 6 reduced

If this method does not produce an accurate estimate of the percentage of students from low-income families or the school does not participate in the federally-supported lunch program, specify a more accurate estimate, tell why the school chose it, and explain how it arrived at this estimate.

10. Students receiving special education services: 9 %
36 Total Number of Students Served

Indicate below the number of students with disabilities according to conditions designated in the Individuals with Disabilities Education Act.

1 Autism	1 Orthopedic Impairment
____ Deafness	4 Other Health Impaired
____ Deaf-Blindness	19 Specific Learning Disability
1 Emotional Disturbance	10 Speech or Language Impairment
____ Hearing Impairment	____ Traumatic Brain Injury
____ Mental Retardation	____ Visual Impairment Including Blindness
____ Multiple Disabilities	

11. Indicate number of full-time and part-time staff members in each of the categories below:

	Number of Staff	
	Full-time	**Part-Time**
Administrator(s)	1	
Classroom teachers	17	1
Special resource teachers/specialists	10	11
Paraprofessionals	3	1
Support staff	7	17
Total number	38	30

12. Average school student-"classroom teacher" ratio: 23:1

13. Show the attendance patterns of teachers and students as a percentage. The student dropout rate is defined by the state. The student drop-off rate is the difference between the number of entering students and the number of exiting students from the same cohort. (From the same cohort, subtract the number of exiting students from the number of entering students; divide that number by the number of entering students; multiply by 100 to get the percentage drop-off rate.) Briefly explain in 100 words or fewer any major discrepancy between the dropout rate and the drop-off rate. (Only middle and high schools need to supply dropout rates and only high schools need to supply drop-off rates.)

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Daily student attendance	97%	97%	97%	97%	96%
Daily teacher attendance	97%	96%	96%	97%	97%
Teacher turnover rate	10%	9%	15%	6%	12%
Student dropout rate (middle/high)	N/A%	N/A%	N/A%	N/A%	N/A%
Student drop-off rate (high school)	N/A%	N/A%	N/A%	N/A%	N/A%

PART III - SUMMARY

Arthur Road Elementary School is one of four kindergarten through fourth grade elementary schools in the Solon City School District, located in the city of Solon about 30 minutes southeast of Cleveland, Ohio. The school is also home to the district's Integrated Preschool Program. The school's total enrollment for students in grades K-4 for the 2004-05 school year is 397 students, who come from diverse backgrounds.

Arthur Road Elementary is known as a warm, welcoming, child-centered school. The school's vision sets forth the high aspirations students and staff members alike strive to attain:

> ***Arthur Road Elementary School will become a caring community of learners and leaders, where through emphasis on academic achievement, personal pride and mutual respect, both students and staff will be encouraged to reach their full potential.***

Arthur Road students approach their academic and social education cognizant of the school's "3R's:" Be Respectful, Be Responsible and Remember the Golden Rule. Everyone at Arthur Road takes these school expectations seriously and the results are reflected in the respectful and positive school climate that exists.

Once a month, Arthur Road celebrates a school Spirit Day, which begins as two fourth grade students lead the entire student body in reciting the school motto ("Arthur Road is a welcoming and safe place for all learners") and the school pledge ("We pledge to do our best, to be respectful, responsible and kind to everyone so that we all can grow, have fun and learn from our teachers and from each other"). Both the motto and the pledge reflect the value the school places on a positive learning environment for all students.

Students at Arthur Road have many opportunities to receive recognition for their accomplishments, including the setting and achieving of personal goals through the school's Star Student Program. Twice a month, each teacher is able to nominate one student from the class to be a Star Student. The Star Students from each grade level have lunch with the principal, who shares with the group the teachers' specific and descriptive feedback regarding the reasons each student was deserving of the honor.

Similarly, the Arthur Road staff pursues the setting and attainment of personal and professional goals through the development of a strong, collegial Professional Learning Community. Grade level teams meet twice weekly, with one meeting focused on student learning and the other on discussion of curriculum and assessment-related topics. The Solon City Schools places a high priority on staff development, thus the Arthur Road staff is skilled in many facets of education, including differentiated instruction and formative assessment. Teachers use a Standards-Based Report Card, which clearly communicates to parents what their children need to know and be able to do at each grade level and how they are progressing toward those educational benchmarks.

The school's PTA is strong and keenly involved in many aspects of life at Arthur Road Elementary. Volunteers are present in the classrooms daily as well as spending many hours working on the 32 active Arthur Road committees. Each year in May the staff and student body honor and thank the volunteers with a luncheon and program to demonstrate the value of volunteerism.

Arthur Road Elementary School is a vivid example of the goals of No Child Left Behind in action. Each member of the skilled and dedicated staff believes that all children can and will learn at consistently high levels and embraces the accountability measures that demonstrate student achievement.

PART IV – INDICATORS OF ACADEMIC SUCCESS

1. The meaning of Arthur Road Elementary School's assessment results.

Ohio has utilized criterion-referenced "Proficiency" tests in reading since the mid 1990s at the fourth grade level and is now undertaking a change to standards-based "achievement" tests in grades three through eight in reading. The percentage of students in all of the Solon City Schools, including Arthur Road Elementary, that pass these tests, whether proficiency or achievement tests, are reported to parents and the community in the form of District Report Cards issued by the Ohio Department of Education yearly and posted on the department's web site. Individual student scores reported directly to parents rank students according to performance. In grade four, students are accessed in writing, reading, math, science and citizenship. Third graders are assessed in reading and for 2005 will take a high-stakes math assessment. For proficiency tests, students are ranked as either Below Basic, Basic, Proficient or Advanced with the latter two categories as an acceptable goal. For the new achievement tests, there are five rankings: Limited, Basic, Proficient, Accelerated and Advanced with the latter three rankings preferred. Data is also disaggregated to give more information regarding program success across all subcategories of children, including those with Learning Disabilities. More information about Ohio's assessment is available at: http://www.ode.state.oh.us/proficiency/technical_data/StatSumm_AchievementTests.asp (for Third Grade Achievement Tests) and www.ode.state.oh.us/proficiency/standards.asp (for Fourth Grade Proficiency Tests).

Illustrating the benefits of changes to reading instruction for Arthur Road students are the data from these test results. In 1997, 70% of the students at Arthur Road were proficient in reading. Similar results were shown for 1998, with 71.1% reading proficiency. In the last two years of data collection from these state tests, many signs of marked growth in student achievement are noticeable in the table below:

School Year	Third Grade Reading Achievement	Fourth Grade Reading Proficiency
2002-03	Not yet implemented	• 93% of all students passed • 92% of learning disabled students passed
2003-04	• 99% of all 3rd grade passed • 100% of learning disabled students passed	• 92% of all students passed

Source: Ohio Department of Education School Report Cards, 1997-2003.

Trends from the past seven years demonstrate that although Arthur Road students were not meeting state goals of 75% passage early on, they are now achieving at very high levels in reading on state assessments and surpassing the state goals by significant margins. Reading Recovery, the 20-week intervention program Arthur Road teachers use to address reading gaps for the lowest achieving first graders, is showing success as well by helping students maintain their gains over time. Specifically, 100% of Reading Recovery students maintained gains and passed the third grade achievement test and 91.6% passed the fourth grade test in 2003-04. These data show remarkable increases in student achievement and reward the efforts and resources of the school's staff, parents and children.

In mathematics, Arthur Road's fourth grade students have continually scored above the standard in math proficiency. In the 2002-03 school year, Arthur Road students achieved a passing rate of 88%. Subsequently, Arthur Road fourth grade student scores improved during the 2003-04 school year, with 97% of students achieving a passing score. In analyzing the results, staff attribute these improved results to greater classroom focus on the benchmarks and indicators, which provided a stronger balance between content and process. The proficiency results were further evaluated to determine strengths and weaknesses. For example, fourth graders show strengths in knowledge and skill (93%), conceptual understanding (92%), number relations (92%) and geometry (92%), but demonstrate relative weaknesses in problem-solving (80%) and estimation (83%). This information helps to guide classroom instruction and improve on student learning in target areas.

With the provision of diagnostic mathematics tests for students in kindergarten through second grade last year, staff was able to more completely evaluate how Arthur Road's primary students were progressing toward meeting state indicators in mathematics. The collated results of the diagnostic assessments showed that among kindergarten students 92% are reaching on-track status. In grade one, 88% of students achieved on-track status and finally, 97% second graders demonstrated they were on track. Children identified as not meeting the designated on-track status were targeted early in their next school year for special attention to close their achievement gaps.

2. How Arthur Road Elementary School uses assessment data to understand and improve student and school performance.

Arthur Road School uses a variety of formative and summative assessment data daily to drive instruction and improve student and school performance. Before the school year begins, teachers utilize the district's student information system to access summative data about individual student's performance in reading, writing, spelling, math, science and social studies. Additionally, standardized test data, such as achievement or proficiency data, is shared with teachers. Teachers also engage in weekly grade level meetings at the beginning of the year that are focused on analyzing student data and determining a grade level SMART (Specific, Measurable, Attainable, Results-Oriented, Time-Bound) goal for the coming school year.

Within the first month of a new school year, teachers utilize diagnostic tools to assess all children in the areas of reading, writing and spelling to determine the best placement for students within differentiated learning groups. Daily, teachers are involved in providing specific, immediate feedback to students in all content areas (assessment "for" learning) to ensure understanding and to improve academic performance. For example, in the *Trailblazers* math program, assessments "for" learning are embedded throughout each unit. This allows the teacher to intervene or accelerate students as needed throughout the unit, rather than waiting until the end of the unit for intervention or acceleration. Weekly, teachers continue the grade level team meetings initiated at the beginning of the year with a refined focus, discussing students who are having difficulty in the classroom. Teachers bring current data to the meeting to assist in determining the student's strengths and weaknesses. These meetings provide a collaborative framework through which staff can identify effective solutions for students who may need interventions of some kind to bolster their mastery of academic content.

As the school year ends, teachers at Arthur Road share the results of their SMART goal data with one another to extend their learning professionally. In addition, students are formally assessed diagnostically in reading, writing, spelling and math to ensure that they have completed the school year achieving adequate yearly progress as well as to lay the ground work for guiding individualized instruction for the next school year.

3. How Arthur Road communicates assessment data to parents, students and the community.

The academic success of Arthur Road Elementary students is a reflection of the commitment to excellence and partnership among the students, staff and parents. The key to the effectiveness of this educational partnership is adherence to a communications philosophy based on continuous and open communication with the district's target audiences, such as students, staff, parents, the community at large, legislators and elected officials at the local, state and federal levels, as well as the media. The focus of this ongoing communication is creating dialogue regarding educational goals and initiatives, namely student achievement as measured by assessment results.

Specifically, parents of Arthur Road students receive information about upcoming state assessments through letters from the principal. Subsequent to receiving the results, the school mails the assessment report generated by the state of Ohio's assessment vendor to parents with each student's year-end report card. As district report cards are issued by the state of Ohio each year, the Solon City Schools reports on these results in a variety of ways. Information is disseminated to parents through the PTA and reports on student achievement are routinely included in press releases issued to the media and posted on the district's web site. Inherent in this communication is ongoing media contacts to ensure coverage about assessment results is accurate.

In addition, these releases are emailed to all families in the district (Internet connection among Solon families is well over 95%). Articles detailing assessment results and student achievement are regularly included in the district's community-wide newsletter, *Know Your Schools*. Reports related to assessment data are also made regularly during district Board of Education meetings, which are broadcast on Solon Education Television, a cable access station for the Solon Schools funded by the city of Solon's cable franchise fees.

Together, these coordinated communications assist students, parents and the community in clearly understanding today's standards-based educational arena.

4. How Arthur Road has shared and will continue to share its success with other schools.

The Arthur Road learning community has readily embraced the infusion of accountability and public reporting of assessment results into education. However, at the same time, it has rebuked the concept that the methods used to achieve student academic success and analyze assessment data in such a way that they can truly impact instruction and student progress is proprietary. Unlike the business world where "secrets to success" are closely guarded to benefit only that corporation's clients, the Arthur Road staff believes strongly that as educators they have the responsibility to share educational best practices with all colleagues to benefit all students.

As such, the staff collaborates with colleagues at the other elementary buildings in the district on a regular basis, refining and enhancing instructional strategies and assessment data analysis. The staff's philosophy is that individual teachers are not alone responsible for student success; instead all professionals have a collective responsibility to ensure each and every student meets his or her academic goals.

Similarly, the staff collaborates and models best teaching practices for teachers and administrators in other school districts as well. Hardly a week goes by that a cadre of teachers is not visiting Arthur Road to observe student and teacher work in classrooms, particularly with regard to the staff's implementation of the components of comprehensive literacy – reading and writing workshops and word study. In addition, Arthur Road teachers willingly take time to travel to other districts as well to share their teaching strategies and model lessons with those teachers' own students.

Arthur Road teachers also share with other schools and teaching professionals by participating in state of Ohio curriculum and assessment committees and serving as instructors for professional development courses offered for teachers by the state of Ohio. In addition, Arthur Road staff members eagerly participate in research studies to help demonstrate the effectiveness of teaching strategies that impact student achievement. For example, a recent article published in the journal, *Reading Teacher,* was written by teachers, many of whom are on the Arthur Road staff, to report the results of their research, which illustrates the benefits of the district's word study instruction.

PART V – CURRICULUM AND INSTRUCTION

1. Arthur Road's core curriculum and student engagement in academic content standards.

The curriculum at Arthur Road and the Solon City Schools is aligned with all of Ohio's Academic Content Standards, including the core curricular areas of English language arts, math, science and social studies. Teachers from Arthur Road in each grade level have served on a number of district-wide curriculum committees in the past few years to ensure that the core curriculum is aligned with the state standards as soon as they are adopted by the state of Ohio.

The language arts program is centered on research-based practices in comprehensive literacy. The five components of reading (phonemic awareness, phonics, fluency, vocabulary and comprehension) are taught in a variety of ways through a reading workshop approach. All children receive direct strategy instruction through whole group reading instruction; students read independently to sustain time for individual practice; and students are served by their teachers in needs-based guided reading groups regularly. Decision making in the reading program is based on regular, on-going assessment. The writing program, too, is taught through a workshop approach. Instruction at Arthur Road includes direct strategy instruction on the craft and conventions of writing and includes ample opportunities for small group interaction and individual practice on teacher-selected and child-selected topics. Children receive regular feedback on their abilities as well as instruction that attempts to nurture writing development toward district standards and benchmarks. District developed rubrics are utilized as a tool to provide descriptive feedback to students on an on-going basis. Arthur Road takes a developmental word study approach to spelling, as teachers view this as the "cement" between the two processes of reading and writing. Teachers at Arthur Road meet regularly and systematically with students in small groups to provide instruction along a developmentally sequenced course in word study.

The math support material adopted by the Solon City Schools for students in kindergarten through fifth grade and used at Arthur Road Elementary School is *Trailblazers*. Math content is centered on the Ohio Academic Content Standards that are derived from the National Council of Teachers of Mathematics' standards. The core content in math includes number sense and operations; measurement, geometry and spatial sense; patterns, functions and algebra; data analysis and probability; and mathematical processes.

Through careful analysis, teachers have also determined the areas of *Trailblazers* that are not well-aligned with the standards and have developed supplements to ensure that all content standards are addressed. Consequently, Arthur Road math students are party to a rich experience based on collaborative learning and idea sharing, deep problem-solving and reasoning, and the application and analyzing of the concepts they are studying. By working in small groups using manipulatives and other math tools, and communicating their mathematical thinking with one another, students are better able to connect math concepts with real-life experiences and other areas of study, a critical skill for using math throughout their lifetime.

The science and social studies curricula reflect a hands-on, inquiry-based approach to learning. Modeled after the Ohio academic content standards, teachers at Arthur Road have used a backward design approach to unit development. Teachers utilize the course of study to understand the big ideas, write proposition statements to understand the core content and write essential questions that will guide instruction. Common assessments are developed after teachers have a clear understanding of the content. Hands-on, inquiry-based learning activities are then chosen based on the academic content standards and the assessment. Science curriculum includes earth and space sciences, life sciences, physical sciences, science and technology, scientific inquiry and scientific ways of knowing. Social studies curriculum includes history, people in societies, geography, government, citizenship, rights and responsibilities and economics.

Technology is integrated within all of the core subject areas. Arthur Road has a computer lab as well as five computers in each classroom to meet district-adopted technology competencies and state standards at each grade level.

2a. Arthur Road's reading curriculum.

Before the recommendations of the National Reading Panel and before the inception of No Child Left Behind, Arthur Road Elementary and the Solon City Schools were pursuing a research-based literacy curriculum. Understanding the critical importance of literacy, particularly reading, the district began studying the research to identify approaches, materials and interventions that would result in student success. As a result of consulting the research, Solon teachers chose not to adopt any commercial programs; instead, they implemented a Comprehensive Literacy approach for all kindergarten through sixth grade classrooms, relying heavily on small-group guided instruction as the mainstay of daily instruction. As a staff, the teachers engaged in small study groups and larger in-service groups and utilized a literacy coach to model best teaching practices in classrooms to increase the staff's knowledge base about high-quality literacy instruction. Guided by the philosophy of making the classroom teacher the first line of intervention, all children receive differentiated instruction in reading, writing and spelling to meet the unique needs of the school's diverse student population. The research about reading instruction compelled the staff to transform its practice from a "one-size-fits-all" approach to a more differentiated and diagnostic approach to reading in which the best teaching is based on assessment of student strengths and weaknesses. To identify the strengths and weaknesses of individual children, teachers implement classroom-based formative assessment by using individually administered assessments to assess fluency, processing and decoding, strategy use and comprehension to identify appropriate text levels and needs for instruction. Using all components of Comprehensive Literacy—read aloud, shared reading, guided reading and independent reading—teachers design instruction based upon student needs in relation to Ohio English Language Arts Content Standards.

For the majority of children, the classroom teacher *is* the intervention—he or she diagnostically determines strengths and weaknesses and then appropriately selects reading materials and research-based strategies to instruct in small, guided reading groups, resulting in increased student learning. As a safety

net to this high-quality diagnostic teaching, the staff also consulted the research about reading intervention and determined that *early* intervention is best and that interventions should match classroom practices as well as be based on current research. In the 2000-01 school year, the Solon Schools, including Arthur Road, implemented Reading Recovery because it provides early, intensive, research-based intervention and because its success is well-documented. Additionally, the school's special education teachers were trained in research-based techniques and interventions and are required to utilize the same assessments, materials and approaches used by classroom teachers. This combination of high-quality diagnostic teaching, solid research-based early intervention and special education that matches classroom practices has resulted in increased student achievement in reading for all students.

3. How Arthur Road's math curriculum contributes to students' development of essential skills and knowledge.

Arthur Road teachers believe strongly that math is best learned in an environment that encourages students to share their thinking so that they can learn from one another. Students often work with a partner or in groups. They know that their teachers will often ask them to solve a problem more than one way. Developing a math classroom culture has helped children to feel comfortable sharing their solutions and focus on learning from each other as well as their teacher.

The Solon City Schools adopted *Math Trailblazers* at the beginning of the 2003-04 school year to provide the core resource for mathematics instruction. This textbook series provides the balance of instruction between content and process that the staff desires. It also involves students in many hands-on, concrete lessons to provide the scaffold to learning new concepts. Classrooms are stocked with a variety of math manipulatives to which children have easy access. Learning math with such materials helps all children to develop deep, conceptual understanding that scaffolds them to the abstract learning at their own pace.

Arthur Road teachers typically use 80 minutes of daily instructional time for math. This includes 20 minutes for calendar time or daily problem-solving along with a 60-minute, teacher-directed math lesson. There are also opportunities within a week for students to use classroom or lab computers to create spreadsheets, solve math problems or practice basic facts.

Arthur Road teachers strive to help every child achieve in mathematics. They use data from state assessments as well as information from formative assessments. Classroom observations are recorded and plans are made to assist every child in reaching every indicator. The strength of the school's math curriculum lies in the continual emphasis on students viewing themselves as mathematicians and understanding that math exists all around them in their daily lives. Teachers clearly outline a specific learning target for the students to make clear correlations between the math concepts they are studying and real-life examples. Additionally, students spend quite a bit of time communicating their thoughts and answers to their peers and discussing alternate ways to solve the problems they are considering. In this way, teachers are better able to guide students in achieving the school's mission of creating a collaborative learning environment built on mutual respect and developing the skills and knowledge they need to reach their full potential.

4. Differentiated instruction methods used at Arthur Road to improve student learning.

The Arthur Road staff differentiates curriculum to meet the diverse needs of all learners. Teachers differentiate curriculum in the areas of reading, writing and word study through a comprehensive literacy

approach. Diagnostic assessment data is collected on every student at Arthur Road at the beginning of the year in language arts. Instructional methods are then tailored to meet the needs of each child in the classroom.

In the curriculum areas of science and social studies, Arthur Road teachers use an inquiry-based model to explore science and social studies concepts. Students are presented with guiding questions, which lend to exploration through experimentation. Consistent use of the scientific process is embraced in science to challenge students to "think like a scientist."

Math instructional methods are constructivist in nature. Students are challenged to solve problems using methods that make sense to them. As they develop deep conceptual understanding using methods that are developmentally appropriate for them, other methods are then introduced to help learners become more efficient in their problem-solving abilities. *First in Math* is a web-based computer program Arthur Road students use to supplement their study of math facts. As students practice math facts at home through the use of this program, their ability to manipulate numbers increases and their mastery of the facts becomes more fluid, leaving more instructional time at school to solve problems and explore math concepts that have a higher cognitive complexity level.

Consistent, daily collaboration occurs between regular education teachers and support (special education and gifted education) teachers to ensure that all students are being challenged to reach their full potential.

5. Arthur Road's professional development program and its effect on student achievement.

The Solon City Schools and Arthur Road Elementary place a high premium on the value of professional development and have made considerable commitments to furthering the education of its staff through professional development with both time and resources. This is because the Arthur Road staff has acknowledged the research demonstrating improvements in student learning cannot occur in the absence of continual teacher learning.

Arthur Road's professional development plan is based on a combination of teacher learning with the assistance of content area consultants as well as in-depth collaborative learning in groups with content area experts within the district. The Solon City Schools employs full-time literacy and math resource teachers, who work collaboratively with teachers in the classroom setting. Additionally, these content area experts provide numerous opportunities for professional development within the school system. Arthur Road also has a full-time curriculum resource teacher who collaborates, co-teaches and provides additional support materials to teachers on a flexible, as-needed basis. Arthur Road teachers are also engaged in directly aligning lessons within *Math Trailblazers* to the Ohio Academic Content Standards. Pacing guides have been developed to ensure that teachers are on track in teaching mathematics to ensure students have the knowledge and skills to demonstrate their understanding for state outcome measures as required by state standards. Science and social studies committee members are working to develop new units based on the content standards, as well. At monthly staff meetings, in-service programs are provided to all teachers to share the work that committee members have undertaken. Lastly, administrators and teacher leaders are currently engaged in the study and deeper implementation of assessment literacy to fully embed teacher learning about the impact of formative assessment and teacher reflection on student learning.

PART VII - ASSESSMENT RESULTS

STATE CRITERION-REFERENCED TEST

Subject **Reading** Grade **3** Test **Ohio Achievement Test**

Edition/Publication Year **2004** Publisher **Ohio Department of Education**

	2003-04	
Testing month	March	
SCHOOL SCORES		
% At or Above Limited	100%	**The Third-Grade Reading Achievement Test was not administered prior to 2003-2004.**
% At or Above Basic	100%	
% At or Above Proficient	99%	
% At or Above Accelerated	90%	
% At Advanced	72%	
Number of students tested	83	
Percent of total students tested	100%	
Number of students alternatively assessed	0	
Percent of students alternatively assessed	0%	
SUBGROUP SCORES		
1. White (specify subgroup)		
% At or Above Limited	100%	
% At or Above Basic	100%	
% At or Above Proficient	100%	
% At or Above Accelerated	95%	
% At Advanced	80%	
Number of students tested	66	
2. African American (specify subgroup)		
% At or Above Limited	100%	
% At or Above Basic	100%	
% At or Above Proficient	100%	
% At or Above Accelerated	100%	
% At Advanced	33%	
Number of students tested	N/C	
STATE SCORES		
% At or Above Limited	100%	
% At or Above Basic	90%	
% At or Above Proficient	78%	
% At or Above Accelerated	59%	
% At Advanced	33%	

The table above reflects Ohio's assessment categories and terminology.

N/C in the Part VII – Assessment Results tables represents "not calculated" due to fewer than 10 students in the subgroup. With fewer than 10 students, the subgroup does not comprise sufficient numbers to be part of the state's assessment report.

STATE CRITERION-REFERENCED TEST

Subject **Reading** Grade **4** Test **Ohio Proficiency Test**

Edition/Publication Year **2004** Publisher **Ohio Department of Education**

	2003-04	2002-03	2001-02	2000-01	1999-2000
Testing month	March	March	March	March	March
SCHOOL SCORES					
% At or Above Below Basic	100%	99%	N/A	N/A	N/A
% At or Above Basic	100%	99%	N/A	N/A	N/A
% At or Above Proficient	93%	93%	93%	82%	88%
% At Advanced	38%	20%	22%	11%	23%
Number of students tested	66	89	83	N/A	N/A
Percent of total students tested	100%	100%	100%	N/A	N/A
Number of students alternatively assessed	0	0	0	N/A	N/A
Percent of students alternatively assessed	0%	0%	0%	N/A	N/A
SUBGROUP SCORES					
1. White (specify subgroup)					
% At or Above Below Basic	100%	N/A	N/A	N/A	N/A
% At or Above Basic	100%	N/A	N/A	N/A	N/A
% At or Above Proficient	91%	99%	93%	84%	N/A
% At Advanced	36%	N/A	N/A	N/A	N/A
Number of students tested	56	66	76%	N/A	N/A
2. African American (specify subgroup)					
% At or Above Below Basic	100%	N/A	N/A	N/A	N/A
% At or Above Basic	100%	N/A	N/A	N/A	N/A
% At or Above Proficient	100%	60%	80%	N/A	N/A
% At Advanced	0%	N/A	N/A	N/A	N/A
Number of students tested	N/C	10	N/C	N/A	N/A
STATE SCORES					
% At or Above Below Basic	100%	100%	N/A	N/A	N/A
% At or Above Basic	92%	91%	N/A	N/A	N/A
% At or Above Proficient	71%	66%	68%	56%	58%
% At Advanced	15%	9%	7%	7%	6%

The table above reflects Ohio's assessment categories and terminology.

N/C in the Part VII – Assessment Results tables represents "not calculated" due to fewer than 10 students in the subgroup. With fewer than 10 students, the subgroup does not comprise sufficient numbers to be part of the state's assessment report.

STATE CRITERION-REFERENCED TEST

Subject **Mathematics** Grade **4** Test **Ohio Proficiency Test**

Edition/Publication Year **2004** Publisher **Ohio Department of Education**

	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000
Testing month	March	March	March	March	March
SCHOOL SCORES					
% At or Above Below Basic	100%	100%	N/A	N/A	N/A
% At or Above Basic	100%	93%	N/A	N/A	N/A
% At or Above Proficient	97%	88%	95%	95%	77%
% At Advanced	74%	42%	34%	43%	21%
Number of students tested	66	89	83	N/A	N/A
Percent of total students tested	100%	100%	100%	N/A	N/A
Number of students alternatively assessed	0	0	0	N/A	N/A
Percent of students alternatively assessed	0%	0%	0%	N/A	N/A
SUBGROUP SCORES					
1. White (specify subgroup)					
% At or Above Below Basic	100%	N/A	N/A	N/A	N/A
% At or Above Basic	100%	N/A	N/A	N/A	N/A
% At or Above Proficient	96%	92%	94%	96%	N/A
% At Advanced	73%	N/A	N/A	N/A	N/A
Number of students tested	56	66	75	N/A	N/A
2. African American (specify subgroup)					
% At or Above Below Basic	100%	N/A	N/A	N/A	N/A
% At or Above Basic	100%	N/A	N/A	N/A	N/A
% At or Above Proficient	100%	50%	80%	N/A	N/A
% At Advanced	0%	N/A	N/A	N/A	N/A
Number of students tested	N/C	10	N/C	N/A	N/A
STATE SCORES					
% At or Above Below Basic	100%	100%	N/A	N/A	N/A
% At or Above Basic	77%	70%	N/A	N/A	N/A
% At or Above Proficient	66%	59%	63%	59%	49%
% At Advanced	26%	15%	17%	16%	11%

The table above reflects Ohio's assessment categories and terminology.

N/C in the Part VII – Assessment Results tables represents "not calculated" due to fewer than 10 students in the subgroup. With fewer than 10 students, the subgroup does not comprise sufficient numbers to be part of the state's assessment report.